

AMENDMENTS

CLAIM AMENDMENTS

✓ 31. (Currently amended) A method of stimulating an anti-tumor immune response or treating a neoplastic disease, comprising administering to a subject a composition comprising:
~~either a cell genetically altered to produce a cytokine at an elevated level, or the progeny of such a cell,~~
a cell expressing a cytokine from a recombinant polynucleotide,
wherein the cytokine is stably associated in the cell outer membrane
(and wherein the cell has been inactivated to prevent proliferation.)

✓ 32. (Currently amended) The method of claim 31, wherein the cytokine is selected from the group consisting of IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.

✓ 33. (Previously added) The method of claim 31, wherein the cell is a cancer cell.

✓ 34. (Currently amended) The method of claim 31, wherein the cell is from a ~~cancer tumor~~ of the same tissue type as a tumor in the subject.

✓ 35. (Currently amended) The method of claim 34, wherein the ~~cancer tumor~~ is an ovarian cancer or a brain cancer.

✓ 36. (Previously added) The method of claim 31, wherein the cell is allogeneic to the subject.

✓ 37. (Previously added) The method of claim 31, wherein the cell is histocompatibly identical to the subject.

✓ 38. (Previously added) The method of claim 31, wherein the composition further comprises a tumor-associated antigen, and wherein the combination of the cytokine and the

tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the subject.

39. *(Previously added)* The method of claim 38, wherein the tumor-associated antigen is obtained from a cell autologous to the subject.

✓40. *(Previously added)* The method of claim 38, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.

41. *(Previously added)* The method of claim 38, wherein the composition comprises a combination of:

- a) the cell expressing the membrane-associated cytokine; and
- b) a tumor cell autologous to the subject;

wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the subject.

42. *(Previously added)* The method of claim 41, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the subject.

43. *(Previously added)* The method of claim 41, wherein the tumor cell is a glioma, a glioblastoma, a gliosarcoma, an astrocytoma, or an ovarian cancer cell.

44. *(Currently amended)* The method of claim 41, wherein the tumor cell is inactivated has been inactivated by irradiation.

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45. *(Currently amended)* The method of claim 31, wherein the cell expressing the membrane-associated cytokine is inactivated has been inactivated by irradiation.

✓46. *(Previously added)* The method of claim 31, wherein the cell produces a secreted cytokine in addition to the cytokine stably associated in the outer membrane.

✓47. (Previously added) The method of claim 31, wherein a majority of the cytokine produced by the cell is present on the outer membrane of the cell.

B4 ✓48. (Currently amended) The method of claim 38, wherein the cytokine is selected from the group consisting of IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.

✓49. (Previously added) The method of claim 31, wherein the composition comprises at least two cells, each of which has been genetically altered to produce a different cytokine at an elevated level, or is the progeny of such a cell, and wherein each cytokine is stably associated in the outer membrane of the cell.

B5 ✓50. (Currently amended) A method of stimulating an anti-tumor immune response or treating a neoplastic disease, comprising administering to a subject a composition comprising a tumor associated antigen and a population of cells expressing a transmembrane cytokine, wherein the cells have been inactivated to prevent proliferation, and at a level sufficient to stimulate wherein the composition is effective in stimulating an immune response to the tumor associated antigen in the subject.

51. (Previously added) The method of claim 31, wherein the cell is a human cell.

✓52. (Previously added) The method of claim 31, wherein the cytokine naturally occurs as a membrane cytokine.

✓53. (Previously added) The method of claim 31, wherein the cytokine is a fusion protein comprising a heterologous transmembrane region.

✓54. (Previously added) The method of claim 31, wherein the cell has been transduced with a retroviral expression vector, or is the progeny of such a cell.

B6 ✓55. (Currently amended) The method of claim 31, which is a method for stimulating a primary priming an anti-tumor immune response.

B6 56. (*Currently amended*) The method of claim 31, which is a method for stimulating a secondary boosting or maintaining an anti-tumor immune response.

✓ 57. (*Previously added*) The method of claim 31, which is a method for treating a neoplastic disease.

✓ 58. (*Previously added*) The method of claim 31, further comprising providing the cytokine expressing cell that is present in the composition.

✓ 59. (*Previously added*) The method of claim 38, further comprising providing the tumor associated antigen that is present in the composition.

✓ 60. (*Previously added*) The method of claim 31, further comprising transducing a cancer cell with an expression vector encoding the membrane-associated cytokine.

61. (*New*) The method of claim 31, wherein the cytokine is IL-4.

62. (*New*) The method of claim 31, wherein the cytokine is GM-CSF.

✓ 63. (*New*) The method of claim 31, wherein the cytokine is M-CSF.

B7 ✓ 64. (*New*) A method of stimulating an anti-tumor immune response or treating a neoplastic disease, comprising administering to a subject a composition containing an allogeneic cell genetically altered to produce a cytokine at an elevated level, or the progeny of such a cell, wherein the cytokine is stably associated in the cell outer membrane.

✓ 65. (*New*) The method of claim 64, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF- α , and M-CSF.

66. (New) The method of claim 64, wherein the cell is from a tumor of the same tissue type as a tumor in the subject.

✓ 67. (New) The method of claim 64, wherein the composition further comprises a tumor-associated antigen, and wherein the combination of the cytokine and the tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the subject.

68. (New) The method of claim 67, wherein the tumor-associated antigen is obtained from a cell autologous to the subject.

✓ 69. (New) The method of claim 67, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.

B7 70. (New) The method of claim 67, wherein the composition comprises a combination of:

- a) the cell expressing the membrane-associated cytokine; and
- b) a tumor cell autologous to the subject;

wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the subject.

71. (New) The method of claim 70, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the subject.

✓ 72. (New) The method of claim 64, wherein the cell expressing the membrane-associated cytokine has been inactivated to prevent proliferation.

73. (New) The method of claim 64, wherein the cell expressing the membrane-associated cytokine has been irradiated.

74. (New) The method of claim 64, wherein the cell is a human cell.

✓75. (New) The method of claim 64, wherein the cytokine naturally occurs as a membrane cytokine.

B7 ✓76. (New) The method of claim 64, wherein the cytokine is a fusion protein comprising a heterologous transmembrane region.

✓77. (New) The method of claim 64, which is a method for stimulating an immune response.

✓78. (New) The method of claim 64, which is a method for treating a neoplastic disease.